IN THE SPECIFICATION

Please amend the specification as follows:

Page 1, line 1, please insert the following:

-- Cross-Reference to Related Application

The present application is related to application Serial No. 09/934,601, filed August 23, 2001, by T. Inoue et al, entitled "TURBO DECODER AND RADIO BASE STATION WITH TURBO DECODER AND TURBO ENCODER". --

Please replace the paragraph beginning at page 2, line 6, with the following rewritten paragraph:

-- The turbo decoder 203 includes two decoders 207 and 209, two interleavers 208 and 211 and a de-interleaver 210. When received data U_R, Y_R1 are put into the decoder, the decoder carries out soft output decoding. Further, received data Y_R2 corresponds to the transmitted data Y_T2 constituted by interleaving and convolutionally encoding an original signal X, and the interleaver 208 interleaves decoded data of the decoder 207 to correspond to the received data Y_R2, and interleaved data are put into the decoder 209 and soft output decoding is executed. The de-interleaver 210 deinterleaves an output of a decoded result to be in the order of original data to thereby provide the decoded output U_O. The decoded output U_O is put again into the decoder 207 as received data U_R and the operation mentioned above is repeated. By carrying out the decoding processing repeatedly, randomly generated error or error generated in burst can be corrected. As a decoding system of the decoders 207 and 209, ~~an~~a MAP (maximum a posteriori probability) decoding

system or ~~an~~a SOVA (soft-output Viterbi algorithm) decoding system is well known. Further, the decoders 207 and 209 are constructed by the same constitution and therefore, actually, a single decoder is frequently used to alternately switch for the decoder 207 (for example, for odd number times) and for the decoder 209 (for example, for even number times). --

Please replace the paragraph beginning at page 3, line 5, with the following rewritten paragraph:

-- ~~SUMMARY OF THE INVENTION~~

According to the above-described turbo decoder, by increasing an iteration number of the decoding processing, the correction capability is promoted and ~~error~~errors can be reduced even in a communication channel having poorer quality. However, when the iteration number is increased, an operational processing amount is increased, a higher clock frequency is needed and power consumption is increased. --

Page 3, line 22, delete "SUMMARY OF THE INVENTION".

Please replace the paragraph beginning at page 3, line 5, with the following rewritten paragraph:

-- Next, an explanation will be given of an embodiment of a base station and a mobile station of a mobile communication system introducing an error correction encoding system using the turbo decoder according to the invention. First, as shown

by Fig. 15, a base station ~~4~~ 3a, 3b is connected to a communication network 1 via a base station control station 2 and when speech is made, a wireless communication channel is set between a mobile station ~~5~~5a, 5b and the base station ~~4~~ 3a, 3b in the wireless zone ~~4~~ 4a, 4b of the base station ~~4~~ 3a, 3b. --